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SEMINATRIX PYGAEA IN SOUTH CAROLINA

This species, a degenerate natricine form and the sole representative of its genus, was discovered by Edward Tatnall, of Wilmington, Delaware, at Volusia, Florida, the type locality. It was first described by Cope (1871) as *Contia pygaea*, based mainly on the possession of smooth scutes in conjunction with the scutellation of the head. Boulenger (1893) referred his specimens to *Tropidonotus* (*Natrix*) as *T. pygaeus* on penial characters, and Cope (1895) elevated the species to separate generic rank under the present name, agreeing with Boulenger as to subfamily affinities, but regarding the peculiarities of this snake as meriting independent recognition.

Loennberg (1894) in reporting on some Florida observations, states "I have but rarely found this little snake out of the water, and in such cases only under some log or board near the water's edge. It is common around the borders of the small lakes in Orange County, where I have seen and caught specimens in Lake Eola, Orlando, in and around some small lakes near Clarcona, Toronto, Apopka, and other places."

Heretofore the species has been taken only from peninsular Florida, which territory embraces the range as given by Stejneger and Barbour (1923), and consequently the writer was surprised in the discovery of a specimen at Columbia, S. C., in 1924, some 400 miles northward, and passing over the entire extent of Georgia, from which state there are no published records. Wishing if possible to add further observations before reporting this capture, the present paper was deferred and is now of a more satisfactory nature, as a second specimen has recently been collected.

On April 25, 1924, the writer was accompanied by a small party of students on a field study at Horseshoe Lake, a fairly small and shallow body of water on the outskirts of New Brookland, Lexington County, S.C., just across the Congaree River from Columbia. The first specimen of *Seminatrix* was found here beneath a discarded automobile side curtain which lay partly in and partly out of the water, the snake being just at the water's edge. The second example was brought in by two students from Lakeview, a fairly large pleasure lake formed by the damming of a small stream, in Richland County, S. C., March 20, 1926, a situation some seven miles east of Horseshoe Lake and across the river, which is here wide and rather swift flowing and rough. This snake was taken from an environment similar to that of the first one, being found under a board within a few feet of the water. Both specimens were half grown and typical of the species in every respect.

These records point to the fact that *Seminatrix* is probably to be met with throughout the territory intervening between Florida and Columbia. Such a small and thoroughly aquatic reptile would extend its range but slowly, and the species has doubtless occupied Georgia and South Carolina districts for a long time, but until now has by chance escaped the notice of the somewhat infrequent field observations

of amphibians and reptiles in this section. The northward and westward limits to the distribution of *Seminatrix* remain to be determined.

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RECORDS OF SOME SALAMANDERS FROM SOUTH CAROLINA

The salamanders listed below were received from Professor J. D. Corrington, Department of Zoology, University of South Carolina, who is responsible for the collection of most of the specimens and who has kindly permitted me to present the record.

Necturus punctatus (Gibbes) Mudpuppy. One specimen 152 mm. long from Lakeview, Columbia, taken April 12, 1924; one young, Columbia, May 3, 1922.

Triturus viridescens viridescens (Raf.) Newt. One specimen in the red land stage from Broad river bridge, Columbia, July 15, 1924.

Ambystoma maculatum (Shaw) Spotted Salamander. One specimen, Hopkins, S. C., April 22, 1925.

Ambystoma opacum (Gravenhorst) Marbled Salamander. Two adults, Columbia, April 15, 1924; three larvae about ready to transform, largest 80 mm. long, Columbia, April 22, 1924.

Plethodon glutinosus (Green) Slimy Salamander. One adult, Columbia, (Saluda Forks), April 1, 1922;

Newman's woods, Columbia, October 29, 1922, three specimens; same locality as last, October 14, 1922, three specimens.

Manculus quadridigitatus quadridigitatus (Holbrook) Dwarf Salamander. One specimen from Taylor's pasture, Columbia, May 15, 1924.

Pseudotriton ruber ruber (Sonnini) Red Salamander. The specimens in this series are all typical *P. ruber ruber*. Four of the adults are very old and dark specimens on which the spots have largely fused. Newman's woods, Columbia, October 21, 1924, one recently transformed; Newman's woods, April 12, 1924, two old dark specimens, one bright red specimen; Taylor's pasture, Columbia, May 12, 1923, two old dark specimens; Gregg street, Columbia, March 29, 1924, one larvae.

Eurycea gutto-lineata (Holbrook). Newman's woods, Columbia, October 1922, three specimens.

Desmognathus fuscus. Dusky Salamander. The majority of the specimens approach the subspecies *auriculatus* in their color pattern but they cannot be regarded as absolutely typical. Cayce, Lexington County, March 27, 1924, two specimens; Adam's pond, Columbia, March 14, 1922, four specimens; Harrell's farm, Columbia, May 13, 1924, six specimens; Taylor's pasture, Columbia, April 12, 1924, five specimens; Newman's woods, Columbia, March 22, 1924, five specimens.

Siren lacertina Linne. Mud-eel. Taylor's pond, Columbia, May 21, 1923, one specimen about 156 mm. long.

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NOTES ON A SPECIMEN OF *GOPHERUS BERLANDIERI* (AGASSIZ)

Berlandier's gopher tortoise, *Gopherus berlandieri* (Agassiz), is not supposed to range north of San Antonio, Texas. In the early part of May, 1924, a young boy, Robbins Claypool, informed me that a lady had captured a specimen of a "land terrapin" in the yard at her home on South Seventh street, Waco, Texas, and that she had given it to him. His description of the plastron of the animal excited my curiosity and I asked permission to examine it. It required only a single glance to identify it as the species under consideration. It was in splendid condition and the owner kindly presented it to me.

I am still doubtful of the status of this specimen as a native of this section of the state. At the time it first came into my possession, I circulated inquiries in all parts of south Waco, expecting soon to be informed that some person had transported the animal from southern Texas. However, this information failed to materialize.

The section of town where the tortoise was captured was until the last few years a flat covered with mesquite timber and was the haunt of two amphibians, *Bufo debilis* Girard and *Gastrophryne texensis* (Girard), and a woodpecker (*Dryobates scalaris symplectus* Oberholser) which are outrunners from the southern Texas fauna. The fact that other animals of the San Antonio region extend this far north, does not by any means prove that my tortoise really belongs here and it is still on my hypothetical list.

The *Gopherus* was housed in I. A. Goldstein's terrarium for eight months. While in Goldstein's possession it was quite active at first and ate freely of both animal and vegetable food. In December, it lapsed into a semi-torpid condition. In the early part of February it appeared to be dead and Goldstein brought

it back to me in order that I might preserve its carcass. I placed it near a grate fire and in about an hour it displayed signs of life.

For the balance of the winter, I kept it in a steam-heated building and it would occasionally arouse from its lethargic condition and walk slowly around my office. It would not accept food but would greedily swallow the water I dropped from a small sponge into its mouth. By the middle of February it had become totally blind. It died April 12, and I attribute its death largely to the internal parasites with which it became infested while in the terrarium.

Two species of box-tortoises suffered in much the same manner but were released before their condition became aggravated. On account of the high rate of mortality among the *Testudinata*, due to these parasites, the collection was broken up. In a state of nature, turtles can often overcome the effects of internal parasites but after they have become physically weakened as the result of long captivity, they fall an easy prey to the ravages of certain species of *Nematode* worms.

I would greatly appreciate any one calling my attention to records of the occurrence of Berlandier's gopher in any of the counties north of San Antonio.

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A CONFUSING ERROR

In a memoir published in 1919 entitled "Fossil Fishes of Southern California", the first account of any fossil fishes (except sharks) from the state, I recorded a number of small fishes received from localities about Los Angeles. With these were several photographs made by a student who had tried to identify them, and who, it now appears, had copied

besides his own photographs, for comparison, certain plates of Austrian fossils, published in 1860, by Dr. Steindachner of Vienna.

The whole collection, photographs and all, came into my hands for description. With the others, Jordan & Gilbert (James Z. not Charles H.) described the Austrian forms as also new. I have now worked out the error in detail and have explained it in full in a German journal. In brief I may say that our *Smithites elegans* (1919) is Steindachner's *Clupea elongata* (1860); our *Aboma antiqua* is his *Gobius oblongus*, and our *Sebastavus vertebralis* is his *Gobius elatus*.

It is further true that the name *Clupea elongata* is preoccupied for a fossil mackerel. The species itself is not a *Clupea*, for the idea of genus has changed materially in sixty years. *Smithites elegans* must stand for the Austrian species. *Gobius oblongus* is also preoccupied, and the specific name *antiquus* must replace *oblongus*. But the species belongs neither to *Gobius* nor to *Aboma* and its genus is probably new. *Gobius elatus* is not a goby at all still less an ally of *Sebastes*. I do not yet know where it belongs, but it must stand as *Sebastavus elatus*.

Another species was described by us as *Syngnathus avus* from the best one of several specimens, now before me. Later a restoration of the species was published by me. In connection with the original account, however, a copy of Steindachner's plate of three examples of his *Syngnathus helmsi* was reproduced, supposing it to represent three of our eight small California examples. This was not the case, and the two species are both well defined. The name, *Syngnathus avus* must stand, as well as *Syngnathus helmsi*.

I am indebted to the courtesy of Dr. Georg Duncker of Hamburg, for the information on which this inquiry was started. It is fortunate that the awkward error may be corrected before it confuses paleontologists.

DAVID STARR JORDAN

STRIPED BASS (*R. LINEATUS.*)

Notes obtained from fish in New York markets and restaurants reported to have been shipped in from Maryland. Age determinations based on assumption that species spawns in May in Maryland.

Date	*Weight* lbs.	oz.	*Total Length* inches	*Calculated Age* Yrs.	Mos.	*Remarks*
1926			MALES			
Apr. 12		7.5	10.5	2	11	Ripe fish. Stripped readily.
" 1	1	15	16.25	4	11	Testes weighed 2 oz.
" 3	2	2	16.25	4	11	
" 13	3		19	5	11	Stomach contained partly digested fish about 4" long.
Mar. 27	14	8	34.5	9	11	Testes weighed 14 oz.
			FEMALES			
Apr. 12		10.25	11.5	2	11	Immature.
Mar. 25	17	8	34.5	7	10	Ovaries weighed 14 oz. Two 3" fish in stomach.
Apr. 15	21		34.5	8	11	Ovaries weighed 21 oz.
			SEX UNIDENTIFIED			
1925						
Apr. 1		4.25	9	1	11	
Dec. 17		12	13	2	7	
1926						
Apr. 1	2		16	2	11	Said to have contained small roes.

R. H. CORSON

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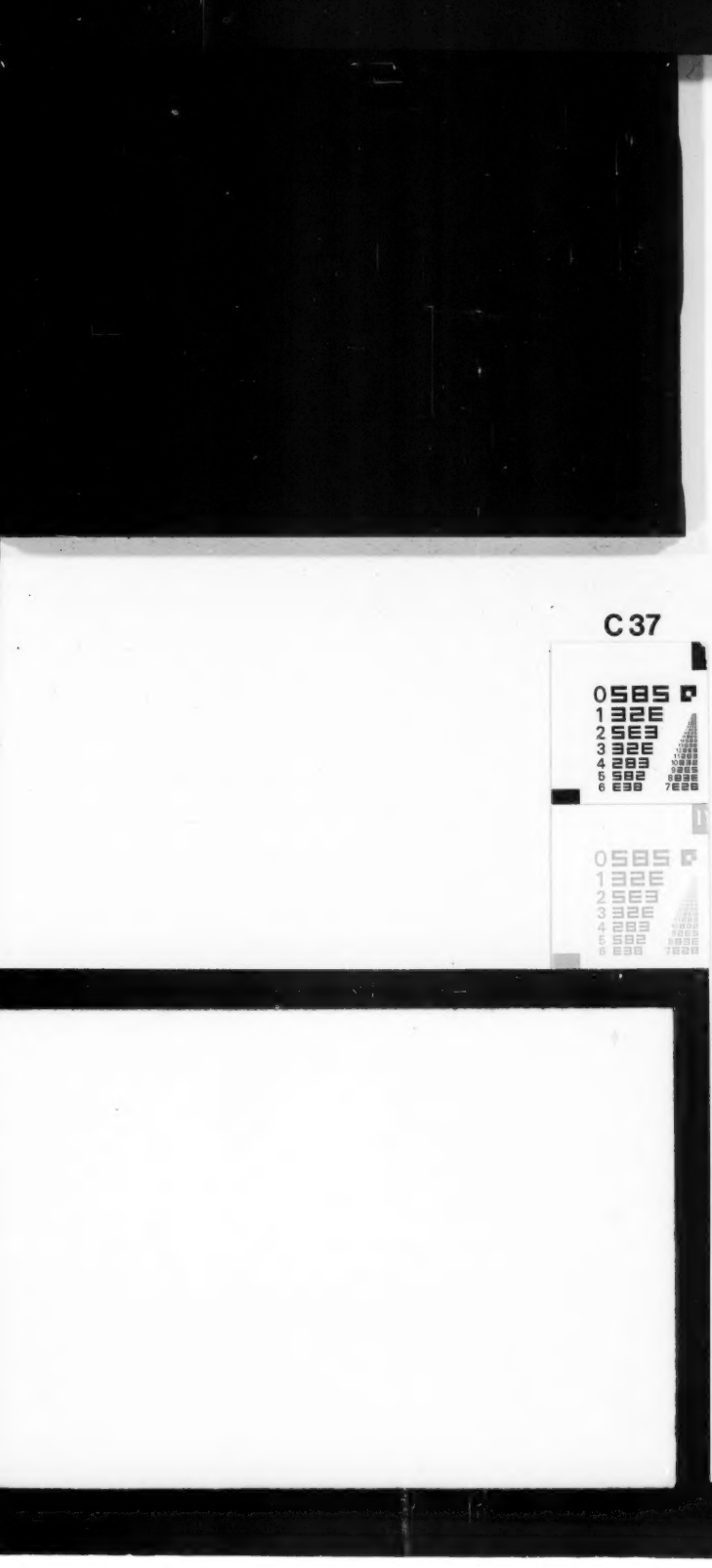
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